



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/798,554  | 03/12/2004  | Erhard Liebig        | 61277-60009         | 6469             |
| 25243   | 7590        | 06/22/2005           | EXAMINER            |                  |
| COLLIER SHANNON SCOTT, PLLC<br>3050 K STREET, NW<br>SUITE 400<br>WASHINGTON, DC 20007 |             |                      | THEISEN, DOUGLAS J  |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1724                |                  |

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/798,554

Applicant(s)

LIEBIG, ERHARD

Examiner

Douglas J. Theisen

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10, 12, 13, 16 and 17 is/are rejected.  
7) ☒ Claim(s) 11, 14 and 15 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 031204.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: in Fig. 1: “1” or “T” near reference no. 5 (combustion air) and reference no. 1 (compressor); in Fig 4: 44 and 45. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1724

4. Claim 1 recites the limitation “the water” in line 1. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 13 recites the limitations “the feedwater inlet” and “the feedwater outlet” in line 3. There is insufficient antecedent basis for these limitations in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 10, 12, 13, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent no. 5,201,366 to Blangetti et al. Blangetti describes a device comprising a vessel (receiver 21) with a plurality of nozzles (nozzles 22) arranged in a lower part of the vessel wherein the vessel comprises a feedwater inlet (cylindrical housing part 20) and a feedwater outlet (at weir 23), and wherein the nozzles are arranged between the feedwater inlet and the feedwater outlet. The device further comprises flow obstacles (baffles 27, 28, and 29) being arranged in a flow path from the feedwater inlet to the feedwater outlet. The nozzles are arranged in a lower half of the vessel. The nozzles are arranged in a lower third of the vessel. See Figures 2 and 3 and column 6, lines 44 to 61.

8. Claims 10, 12, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent no. 2,677,433 to Kretzschmar. Kretzschmar describes a device comprising a vessel (feedwater container 19) with a plurality of nozzles (heating steam nozzles 21) arranged in a

Art Unit: 1724

lower part of the vessel wherein the vessel comprises a feedwater inlet (feedwater pipe 1) and a feedwater outlet (delivery outlet 20) and wherein the nozzles are arranged between the feedwater inlet and the feedwater outlet. The nozzles are arranged in a lower half of the vessel. The nozzles are arranged in a lower third of the vessel. See Figure 1 and column 2, line 36 to column 3, line 14.

9. Claims 10, 12, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent no. 4,534,774 to Lecoffre et al. Lecoffre describes a device comprising a vessel (injection enclosure 26) with a plurality of nozzles (injectors 24) arranged in a lower part of the vessel wherein the vessel comprises a feedwater inlet (branch 4) and a feedwater outlet (branch 1), and wherein the nozzles are arranged between the feedwater inlet and the feedwater outlet. The nozzles are arranged in a lower half of the vessel. The nozzles are arranged in a lower third of the vessel. See Figure 1 and column 2, line 60 to column 3, line 44.

***Allowable Subject Matter***

10. Claims 1-9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. Claims 11, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: The reasons for the indication of allowable subject matter are that the closest prior art describes a method for thermally degassing water in a water-steam cycle. The closest prior art does not

Art Unit: 1724

describe applicant's features of a method for thermally degassing water in a water-steam cycle, the water-steam cycle including a water volume and a steam volume, the method comprising: extracting water from the water volume; extracting steam from the steam volume; admixing the water with the steam to form a two-phase mixture; feeding the resulting two-phase mixture into the water volume. The reasons for the indication of allowable subject matter are that the closest prior art describes a device comprising a vessel with a plurality of nozzles arranged in a lower part of the vessel. The closest prior art does not describe applicant's features of the vessel comprising a water extraction point and a steam extraction point, and the device further comprising a pump having a suction side in fluid connection with the water extraction point and a pressure side in fluid connection with the nozzles; and a water jet injector arranged as a jet pump in a flow path from the pump to the nozzles, and having a suction side connected to the steam extraction point. The closest prior art does not describe applicant's features of the vessel comprising an inlet connected to an evaporator, a steam outlet, and an outlet for the extracted gases, with the inlet and the steam outlet being arranged in a first area of the vessel and the outlet for the extracted gases being arranged in a second area of the vessel different from the first area.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas J. Theisen whose telephone number is 571-272-1168. The examiner can normally be reached on Monday, Tuesday, and Wednesday 6:30 until 4:00.

Art Unit: 1724

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

djt

DUANE SMITH  
PRIMARY EXAMINER  
D-  
6-20-05